

Course Code	18ME761	Credits	3
Course type	OE	CIE Marks	50 marks
Hours/week: L-T-P	3-0-0	SEE Marks	50 marks
Total Hours:	40	SEE Duration	3 Hours for 100 marks

## PROJECT MANAGEMENT

### Course learning objectives

The objective of this course is to

1. Understand Basic concepts of project management and project life cycle.
2. Understand method of project preparation and cost estimation.
3. Understand the human resource responsibility in the project.
4. Apply the appropriate project management tools and techniques.
5. Understand project coordination and control

### Pre-requisites: Management and Entrepreneurship

#### Unit – I

08Hours

**Concepts of project management:** Concepts of a Project, characteristics of a project Categories of projects, Phases of project life cycle, Roles and responsibilities of project leader, tools and techniques for project management.

**Self learning topics:** Project management as profession.

#### Unit – II

08 Hours

**Project planning and estimating:** Feasibility report phased Planning, Project planning steps, Objectives and goals of the project, preparation of cost estimation, and evaluation of project profitability.

**Self learning topics:** Project management bottle necks.

#### Unit – III

08 Hours

**Organizing and staffing the project team :** Skills / abilities required for project manager, Authorities and responsibilities of project manager, Project organizations and types accountability in project execution, contracts and 'R' of contract, tendering and selection of contractors.

**Self learning topics:** Team building for projects.

#### Unit – IV

09Hours

**Tools and techniques in project management:** Bar (GANTT) charts, Bar charts for combined activities. Logic diagrams and networks, Project Evaluation and Review Techniques (PERT), Critical path method -Simple Numerical

#### Unit – V

07Hours

### Unit – V

**Co-ordination and control:** Project direction, Communication in a project, Project coordination, role of MIS in project control.

**Performance measures in project management:** Performance indicators, Performance improvement for the CM & DM companies for better project management, project management environment,

**Self learning topics:** Performance indicators

#### Books

1. S Choudhary, "Project Management" Tata McGraw Hill Education Private Limited New Delhi. 2001
2. Harold Kerzner, "Project Management: A Systems Approach To Planning, Scheduling And Controlling", CBS publisher and distributors
3. L S Srinath " PERT and CPM Principles and Applications" Third Edition
4. Dr. P N Modi "PERT and CPM"

#### Course Outcome (COs)

At the end of the course, the student will be able to

- |  | Bloom's Level |
|--|---------------|
| 1. To understand the Basic concepts of project management and need for project planning. | [L2]          |
| 2. To apply and learn the different methods of project preparation and cost estimation.  | [L3]          |
| 3. To illustrate the feasibility of project.   | [L2]          |
| 4. To apply the different techniques like PERT, CPM.                                     | [L3]          |
| 5. To elaborate the requirement for Project coordination and control                     | [L2]          |

#### Program Outcome of this course (POs)

- |   | PO No. |
|---|--------|
| 1. <b>Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems   | [PO1]  |
| 2. <b>Project management and finance:</b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments. | [PO11] |
| 3. <b>Life-long learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change  | [PO12] |

#### Course delivery methods

1. Lecture
2. Videos
3. PPT
4. NPTEL Course link:  
<http://www.nptel.ac.in/courses/110104073>

#### Assessment methods

1. Quiz
2. IA
3. Assignment
4. Course Projects

**Scheme of Continuous Internal Evaluation (CIE):**

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Components	Average of best two IA tests out of three	Addition of assignments	Course project/Seminar	Total Marks
Maximum Marks: 100	30+30=60	10+10=20	20	100

Self Study topics shall be evaluated during CIE (Assignments and IA tests) and 10% weightage shall be given in SEE question paper.

**Scheme of Semester End Examination (SEE):**

1. It will be conducted for 100 marks of 3 hours duration. It will be reduced to 50 marks for the calculation of SGPA and CGPA.
2. **Minimum marks required in SEE to pass: 40 out of 100**
3. Question paper contains 08 questions each carrying 20 marks. Students have to answer FIVE full questions. SEE question paper will have two compulsory questions (any 2 units) and choice will be given in the remaining three units.

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